

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	Ī	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/083,626	02/26/2002		Karsten Isakovic	117040-55	1786	
21324	7590	07/10/2006		EXAMINER		
HAHN LOE	ESER &	PARKS, LLP	CASCHERA, ANTONIO A			
One GOJO P	laza			ART UNIT	PAPER NUMBER	
Suite 300	J 4421	1 1074		TALER NOMBER		
AKRON, OI	1 4431	1-10/0	2628			
				DATE MAILED: 07/10/2006	5	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)						
	10/083,626	ISAKOVIC ET AL.						
Office Action Summary	Examiner	Art Unit						
	Antonio A. Caschera	2628						
The MAILING DATE of this commun	ication appears on the cover shee	et with the correspondence address						
A SHORTENED STATUTORY PERIOD F WHICHEVER IS LONGER, FROM THE M  Extensions of time may be available under the provisions after SIX (6) MONTHS from the mailing date of this comn  If NO period for reply is specified above, the maximum st  Failure to reply within the set or extended period for reply Any reply received by the Office later than three months a earned patent term adjustment. See 37 CFR 1.704(b).	IAILING DATE OF THIS COMMU of 37 CFR 1.136(a). In no event, however, manunication. atutory period will apply and will expire SIX (6) will, by statute, cause the application to become	JNICATION.  ay a reply be timely filed  MONTHS from the mailing date of this communication.  ne ABANDONED (35 U.S.C. § 133).						
Status								
1) Responsive to communication(s) file	ed on <u>27 <i>April</i> 2006</u> .							
2a) This action is <b>FINAL</b> .	2b)⊠ This action is non-final.							
3) Since this application is in condition	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
closed in accordance with the practi	ce under Ex parte Quayle, 1935	C.D. 11, 453 O.G. 213.						
Disposition of Claims								
4) Claim(s) 1-10 and 39-46 is/are pend	ling in the application.							
4a) Of the above claim(s) is/a	<del>-</del>							
5) Claim(s) is/are allowed.	,							
6)⊠ Claim(s) <u>1-10 and 39-46</u> is/are reject	ted.							
7) Claim(s) is/are objected to.								
8) Claim(s) are subject to restrict	8) Claim(s) are subject to restriction and/or election requirement.							
Application Papers								
9)☐ The specification is objected to by th	e Examiner.							
10)⊠ The drawing(s) filed on 17 June 200	2 is/are: a)⊠ accepted or b)☐ o	objected to by the Examiner.						
Applicant may not request that any obje	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including	the correction is required if the draw	wing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to	by the Examiner. Note the attain	ched Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119								
12)⊠ Acknowledgment is made of a claim a)⊠ All b)□ Some * c)□ None of:	for foreign priority under 35 U.S.	C. § 119(a)-(d) or (f).						
•	1.⊠ Certified copies of the priority documents have been received.							
2. Certified copies of the priority	2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies	3. Copies of the certified copies of the priority documents have been received in this National Stage							
• •	application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action	on for a list of the certified copies	not received.						
Attachment(s)								
1) Notice of References Cited (PTO-892)		riew Summary (PTO-413)						
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (I</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or</li> </ul>		r No(s)/Mail Date e of Informal Patent Application (PTO-152)						
Paper No(s)/Mail Date <u>01/09/06</u> .	6) Other							

#### **DETAILED ACTION**

#### Continued Examination Under 37 CFR 1.114

1. Receipt is acknowledged of a request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e) and a submission, filed on 4/27/06.

### Priority

Acknowledgment is made of applicant's claim for foreign priority under 35
 U.S.C. 119(a)-(d). The certified copy has been filed in the pending application.

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1, 2 and 42-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita et al. (U.S. Patent 5,825,336) in view of Lipkin (U.S. Patent 5,999,944).

In reference to claim 1, Fujita et al. discloses a remote operation apparatus having remote display terminals for processing and displaying video data with remote control processing (see column 1, lines 6-8). Fujita et al. discloses the apparatus comprising of a master display terminal and at least one slave terminal and further, Fujita et al. discloses an alternate embodiment where a plurality of slave terminals are implemented (see column 1, lines 62-64 and Figures 1 & 20).

Note, since the terminals (master display terminal and multiple slave terminals) of Fujita et al. operate upon video data, the Office interprets the terminals functionally equivalent to a "graphics master unit" and "graphics client units" respectively. Fujita et al. discloses the master terminal receiving an input signal associated and set by using a keyboard or mouse (see column 6, lines 64-67) which the Office interprets functionally equivalent to the external input unit and input signal elements of Applicant's claim. Fujita et al. also discloses the master terminal comprising an interface unit, which connects the terminal to a communications network (see columns 5-6, lines 65-3 and #013 & 014 of Figure 1). Note, the Office interprets this interface unit functionally equivalent to the first message channel of Applicant's claim. Fujita et al. discloses the master terminal comprising a random access memory and a data receiving portion for receiving video data transmitted from a slave terminal (see column 5, lines 47-54, column 5-6, lines 65-3 and column 6, lines 54-55). Fujita et al. discloses the video data forwarded onto an operational data generation portion (see column 6, lines 55-63). Fujita et al. further discloses the master terminal using operational data, set via a keyboard or mouse signal, to convert display position data and video data, correcting for display characteristics on a slave terminal and then transmitting this data to the slave display terminal (see columns 6-7, lines 64-6). Fujita et al. also discloses the master terminal computing and transmitting screen parameters indicative of quality, region enlargement ratio etc. to the slave terminal (see column 7, lines 7-10). Note, this data is inherently sent via the interface unit (mentioned above) and first message channel, to the slave terminal (see Figure 1), therefore the Office interprets such data functionally equivalent to the "first message" of Applicant's claim. Fujita et al. discloses a plurality of slave terminals (see Figure 20) wherein each slave comprises their own random access memory (see column 5, lines

Art Unit: 2628

55-63) and an operational data receiving portion for receiving operation and screen parameter data from the master terminal via a communications network (see column 6, lines 30-34 #013, 015, 152 and 158 of Figure 1). Fujita et al. further discloses the slave terminals comprising their own interface unit for connecting the terminals to the master terminal via a communications network and master terminal interface unit (see #013, 014 and 015 of Figure 1) which the Office interprets functionally equivalent to Applicant's "second message interface." Fujita et al. discloses the slave terminals comprising of a display unit for outputting video data (see column 6, lines 10-11 and #10 of Figure 26). Fujita et al. discloses the operational data, received from master terminal, being forwarded to a task control portion, to execute a "task" upon the data and then passes the task executed data to a display portion for display output (see column 7, lines 17-29). Fujita et al. also discloses the slave terminals acquiring video data from the display portion, that has been task executed, and transmitting it back to the master terminal (see column 7, lines 29-36). Note, the Office interprets that the retransmitting of task executed upon data back to the master terminal by the slave terminals, inherently comprises of some sort of completion signal to end communication. Such, a signal is inherent to the communications network and protocols implemented by Fujita et al.. Fujita et al. further discloses a type of remote operation wherein drawing commands are also communicated through a transmission line (see column 1, lines 13-20). Although Fujita et al. discloses receiving video data transmitted from a slave terminal, Fuita et al. does not explicitly disclose the data as a scene graphics file or scene graph file. Lipkin discloses a graphics data processing method and apparatus implementing a server/client architecture where the server receives input from an internal VRML (or scene graphic file) world database or an external database (see columns 6-7, lines 20-26, 41-11 and Figure 1). It would

have been obvious to one of ordinary skill in the art at the time invention was made to implement the VRML/scene graph file processing techniques of Lipkin with the remote control processing techniques of Fujita et al. in order to connect multiple computers to like data or the same virtual world data in order to properly manipulate and display the data on each connected computer respectively (see column 1, lines 20-65 and column 3, lines 16-31 of Lipkin). (further see *Response to Arguments* below).

In reference to claim 2, Fujita et al. and Lipkin disclose all of the claim limitations as applied to claim 1 above. The Office interprets Fujita et al. to inherently produce a third message signal and transmit it to the slave terminals as the system can inherently operate using more than one request for remote operation as Fujita et al. discloses the apparatus as an apparatus for remote controlling a display device (see column 1, lines 6-8) which must be able to handle multiple requests for control.

In reference to claim 42, Fujita et al. and Lipkin disclose all of the claim limitations as applied to claim 1 above. The Office interprets the processing of Fujita et al. to perform in a functionally equivalent time period as Applicant's "real-time computations" since Fujita et al. discloses the apparatus to remotely control a display device from a users interaction (using keyboard/mouse, see column 1, lines 6-8 and column 6, lines 64-67).

In reference to claim 43, Fujita et al. and Lipkin disclose all of the claim limitations as applied to claim 42 above in addition, Lipkin explicitly discloses the server implementing a VRML agent as a software component for managing VRML data and the client implementing a browser with a VRML interpreter for processing VRML data (see columns 6-7, lines 64-2, column 7, lines 21-35 and #16, 26 and 28 of Figure 1).

In reference to claim 44, Fujita et al. and Lipkin disclose all of the claim limitations as applied to claim 1 above. Fujita et al. discloses a plurality of slave terminals (see Figure 20) wherein each slave comprises their own random access memory (see column 5, lines 55-63) and an operational data receiving portion for receiving operation and screen parameter data from the master terminal via a communications network (see column 6, lines 30-34 #013, 015, 152 and 158 of Figure 1). Fujita et al. further discloses the slave terminals comprising their own interface unit for connecting the terminals to the master terminal via a communications network and master terminal interface unit (see #013, 014 and 015 of Figure 1) which the Office interprets functionally equivalent to Applicant's "second message interface." Fujita et al. discloses the slave terminals comprising of a display unit for outputting video data (see column 6, lines 10-11 and #10 of Figure 26). Fujita et al. discloses the operational data, received from master terminal, being forwarded to a task control portion, to execute a "task" upon the data and the passes the task executed data to a display portion for display output (see column 7, lines 17-29). Fujita et al. also discloses the slave terminals acquiring video data from the display portion, that has been task executed, and transmitting it back to the master terminal (see column 7, lines 29-36). Fujita et al. also discloses each slave terminal comprising a CPU connected with the display unit (see #3 and 10 of Figure 26).

4. Claims 3, 4, 39, 40, 45 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita et al. (U.S. Patent 5,825,336), Lipkin (U.S. Patent 5,999,944) and further in view of Ishiwata et al. (U.S. Patent 5,894,312).

In reference to claims 3 and 39, Fujita et al. and Lipkin disclose all of the claim limitations as applied to claims 2 and 1 respectively above however, neither Fujita et al. nor

Lipkin explicitly disclose the master terminal comprising a third random access memory connected to second random access memory. Ishiwata et al. discloses an image processing apparatus connected to external machines, inputting data from the external machines to a plurality of image processing memories (see column 2, lines 22-25). Ishiwata et al. further discloses the external machines to be external computers (see column 4, lines 40-43), inherently comprising of respective memory units. Note, the Office interprets the image processing apparatus functionally equivalent to the graphics master unit of Applicant's claims as the apparatus of Ishiwata discloses a plurality of image memories, seen equivalent to 1st and 3rd random access memories of Applicant's claims. Ishiwata et al. further discloses the image processing apparatus accessing the plurality of memory units by computing addresses of data in the memories in a storing and retrieving mode (see column 4, lines 48-65, column 18, lines 48-62 and Figure 9). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the multiple memory addressing techniques of Ishiwata et al. with the VRML/scene graph file processing techniques of Lipkin and remote control processing techniques of Fujita et al. in order to allow the remote processing apparatus of Ishiwata et al. to split use of image memory resources and provide simultaneous input/output from/to a plurality of slave/client devices, avoiding throughput degradation (see column 2, lines 17-21 of Ishiwata et al.).

In reference to claims 4 and 40, Fujita et al., Lipkin and Ishiwata et al. disclose all of the claim limitations as applied to claims 3 and 1 respectively above. Fujita et al. also discloses the master terminal comprising an interface unit, which connects the terminal to a communications network (see columns 5-6, lines 65-3 and #013 & 014 of Figure 1). Note, the Office interprets

Application/Control Number: 10/083,626

Art Unit: 2628

this interface unit functionally equivalent to the first message channel of Applicant's claim. Fujita et al. discloses the master terminal comprising a random access memory and a data receiving portion for receiving video data transmitted from a slave terminal (see column 5, lines 47-54, column 5-6, lines 65-3 and column 6, lines 54-55). Note, since Fujita et al. discloses the master and slave devices connected via a communications network, the Office interprets that Fujita et al. inherently discloses a plurality of message channels as a communications network operates upon sent and received messages using a plurality of lines to communicate with target devices. Therefore, Fujita et al. inherently discloses the second message channel associated with the master and slave terminals. Ishiwata et al. discloses a control section associated with the image processing apparatus along with each external machine comprising their own data selector (see column 5, lines 6-10). Ishiwata et al. further discloses the control section communicating with the data selectors, a plurality of memory controllers and a host computer (see #1, 2 and 4 of Figure 1). Ishiwata et al. discloses the control section to transfer various pieces of data, along with control signals, such as access position, or memory addresses, in the image memory units (see column 5, lines 22-25). Ishiwata et al. discloses the data selectors retrieving image data stored in image memory units by selecting the desired data bus and passing the data along to the external machines/computers, for further processing (see columns 5-6, lines 57-3). Note, the Office interprets that the transmitting of data back between the processing elements of Ishiwata et al. and Fujita et al., inherently comprises of some sort of completion signal to end communication as Fujita et al. discloses the use of a communications network for connecting master and slave devices.

Page 8

Art Unit: 2628

In reference to claim 45, Fujita et al. and Lipkin disclose all of the claim limitations as applied to claim 1 above. Fujita et al. does not explicitly disclose a partial image switching unit for each graphics client however Ishiwata et al. does. Ishiwata et al. discloses an image processing apparatus connected to external machines, inputting data from the external machines to a plurality of image processing memories (see column 2, lines 22-25). Ishiwata et al. further discloses the image processing apparatus accessing the plurality of memory units by computing addresses of data in the memories in a storing and retrieving mode (see column 4, lines 48-65, column 18, lines 48-62 and Figure 9). Ishiwata et al. discloses a control section associated with the image processing apparatus along with each external machine comprising their own data selector (see column 5, lines 6-10). Ishiwata et al. further discloses the control section communicating with the data selectors, a plurality of memory controllers and a host computer (see #1, 2 and 4 of Figure 1). Ishiwata et al. discloses the control section to transfer various pieces of data, along with control signals, such as access position, or memory addresses, in the image memory units (see column 5, lines 22-25). Ishiwata et al. discloses the data selectors retrieving image data stored in image memory units by selecting the desired data bus and passing the data along to the external machines/computers, for further processing (see columns 5-6, lines 57-3). Note, the Office interprets the data selectors functionally equivalent to the partial image switching units of Applicant's claim. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the multiple memory addressing techniques of Ishiwata et al. with the VRML/scene graph file processing techniques of Lipkin and remote control processing techniques of Fujita et al. in order to allow the remote processing apparatus of Ishiwata et al. to split use of image memory resources and provide simultaneous input/output

Art Unit: 2628

from/to a plurality of slave/client devices, avoiding throughput degradation (see column 2, lines 17-21 of Ishiwata et al.).

In reference to claim 46, Fujita et al., Lipkin and Ishiwata et al. disclose all of the claim limitations as applied to claim 9 above. Fujita et al. discloses the slave terminals comprising of a display unit for outputting video data (see column 6, lines 10-11 and #10 of Figure 26). Fujita et al. discloses the operational data, received from master terminal, being forwarded to a task control portion, to execute a "task" upon the data and then passes the task executed data to a display portion for display output (see column 7, lines 17-29). Fujita et al. also discloses the slave terminals acquiring video data from the display portion, that has been task executed, and transmitting it back to the master terminal (see column 7, lines 29-36). Fujita et al. also discloses each slave terminal comprising a CPU connected with the display unit (see #3 and 10 of Figure 26). Ishiwata et al. discloses the control section to transfer various pieces of data, along with control signals, such as access position, or memory addresses, in the image memory units (see column 5, lines 22-25). Ishiwata et al. discloses the data selectors retrieving image data stored in image memory units by selecting the desired data bus and passing the data along to the external machines/computers, for further processing (see columns 5-6, lines 57-3).

5. Claims 5-10 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujita et al. (U.S. Patent 5,825,336), Lipkin (U.S. Patent 5,999,944), Ishiwata et al. (U.S. Patent 5,894,312) and further in view of Matsumoto et al. (U.S. Patent 5,666,544).

In reference to claims 5 and 41, Fujita et al. Lipkin and Ishiwata et al. disclose all of the claim limitations as applied to claims 4 and 40 respectively above however, neither Fujita et al. nor Ishiwata et al. explicitly disclose a synchronization master unit and synchronization client

(see column 3, lines 28-32 of Matsumoto et al.).

Art Unit: 2628

unit adapted to produce first and second test messages along with first and second test answer messages. Matsumoto et al. discloses a data communication system including a plurality of independent control units each controlling a plurality of independent functional operations (see column 1, lines 6-12). Matsumoto et al. explicitly discloses a "handshaking" method between a drive controller and an operation controller whereby communication mode settings are sent to the drive controller and upon receipt of the data, a settings completion data is sent back to the operation controller (see column 2, lines 9-16 and Figure 18). Such method is performed every time data is sent to the drive controller therefore, the Office interprets Matsumoto et al. to disclose a plurality of test messages a long with a plurality of test answer messages. It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the data handshaking methods of Matsumoto et al. with the multiple memory addressing techniques of Ishiwata et al., the VRML/scene graph file processing techniques of Lipkin and remote control processing techniques of Fujita et al. in order to control the

In reference to claim 6, Fujita et al., Lipkin, Ishiwata et al. and Matsumoto et al. disclose all of the claim limitations as applied to claim 5 above. The Office interprets the processing of Fujita et al. to perform in a functionally equivalent time period as Applicant's "real-time computations" since Fujita et al. discloses the apparatus to remotely control a display device from a users interaction (using keyboard/mouse, see column 1, lines 6-8 and column 6, lines 64-67).

transmission and reception of data from one device to another, making certain that complete data

is transmitted/received thereby improving and controlling the efficiency of the system as a whole

In reference to claim 7, Fujita et al., Lipkin, Ishiwata et al. and Matsumoto et al. disclose all of the claim limitations as applied to claim 6 above. Lipkin explicitly discloses the server implementing a VRML agent as a software component for managing VRML data and the client implementing a browser with a VRML interpreter for processing VRML data (see columns 6-7, lines 64-2, column 7, lines 21-35 and #16, 26 and 28 of Figure 1).

In reference to claim 8, Fujita et al., Lipkin, Ishiwata et al. and Matsumoto et al. disclose all of the claim limitations as applied to claim 7 above. Fujita et al. discloses a plurality of slave terminals (see Figure 20) wherein each slave comprises their own random access memory (see column 5, lines 55-63) and an operational data receiving portion for receiving operation and screen parameter data from the master terminal via a communications network (see column 6, lines 30-34 #013, 015, 152 and 158 of Figure 1). Fujita et al. further discloses the slave terminals comprising their own interface unit for connecting the terminals to the master terminal via a communications network and master terminal interface unit (see #013, 014 and 015 of Figure 1) which the Office interprets functionally equivalent to Applicant's "second message interface." Fujita et al. discloses the slave terminals comprising of a display unit for outputting video data (see column 6, lines 10-11 and #10 of Figure 26). Fujita et al. discloses the operational data, received from master terminal, being forwarded to a task control portion, to execute a "task" upon the data and then passes the task executed data to a display portion for display output (see column 7, lines 17-29). Fujita et al. also discloses the slave terminals acquiring video data from the display portion, that has been task executed, and transmitting it back to the master terminal (see column 7, lines 29-36). Fujita et al. also discloses each slave terminal comprising a CPU connected with the display unit (see #3 and 10 of Figure 26).

In reference to claim 9, Fujita et al., Lipkin, Ishiwata et al. and Matsumoto et al. disclose all of the claim limitations as applied to claim 7 above. Ishiwata et al. discloses an image processing apparatus connected to external machines, inputting data from the external machines to a plurality of image processing memories (see column 2, lines 22-25). Ishiwata et al. further discloses the image processing apparatus accessing the plurality of memory units by computing addresses of data in the memories in a storing and retrieving mode (see column 4, lines 48-65, column 18, lines 48-62 and Figure 9). Ishiwata et al. discloses a control section associated with the image processing apparatus along with each external machine comprising their own data selector (see column 5, lines 6-10). Ishiwata et al. further discloses the control section communicating with the data selectors, a plurality of memory controllers and a host computer (see #1, 2 and 4 of Figure 1). Ishiwata et al. discloses the control section to transfer various pieces of data, along with control signals, such as access position, or memory addresses, in the image memory units (see column 5, lines 22-25). Ishiwata et al. discloses the data selectors retrieving image data stored in image memory units by selecting the desired data bus and passing the data along to the external machines/computers, for further processing (see columns 5-6, lines 57-3). Note, the Office interprets the data selectors functionally equivalent to the partial image switching units of Applicant's claim.

In reference to claim 10, Fujita et al., Lipkin, Ishiwata et al. and Matsumoto et al. disclose all of the claim limitations as applied to claim 9 above. Fujita et al. discloses the slave terminals comprising of a display unit for outputting video data (see column 6, lines 10-11 and #10 of Figure 26). Fujita et al. discloses the operational data, received from master terminal, being forwarded to a task control portion, to execute a "task" upon the data and the passes the task

executed data to a display portion for display output (see column 7, lines 17-29). Fujita et al. also discloses the slave terminals acquiring video data from the display portion, that has been task executed, and transmitting it back to the master terminal (see column 7, lines 29-36). Fujita et al. also discloses each slave terminal comprising a CPU connected with the display unit (see #3 and 10 of Figure 26). Ishiwata et al. discloses the control section to transfer various pieces of data, along with control signals, such as access position, or memory addresses, in the image memory units (see column 5, lines 22-25). Ishiwata et al. discloses the data selectors retrieving image data stored in image memory units by selecting the desired data bus and passing the data along to the external machines/computers, for further processing (see columns 5-6, lines 57-3).

# Response to Arguments

- 6. Applicant's arguments, see page 20 of Applicant's Remarks, filed 04/27/06, with respect to the objection of the specification (the abstract) have been fully considered and are persuasive. The object of the specification has been withdrawn since corrections to the abstract have been made.
- 7. Applicant's arguments with respect to claims 1-10 and 39-46 have been considered but are most in view of the new ground(s) of rejection.
- 8. Applicant's arguments filed 04/27/06 have been fully considered but they are not persuasive.

In reference to claims 1-10 and 39-46, which are based upon the Fujita et al. reference,
Applicant argues that Fujita et al., is not concerned with the synchronized output of image data
(see pages 22-23 of Applicant's Remarks). The Office disagrees with Applicant's statement and

Art Unit: 2628

points to the above rejection where the Office has stated that the retransmitting of task executed upon data back to the master terminal by the slave terminals, inherently comprises of some sort of completion signal to end communication. Such, a signal is inherent to the communications network and protocols implemented by Fujita et al. Further, since master and slave terminals are interfaced through a network communication interface, exchanging of data through networks is inherently synchronized using certain protocols whether it'd be, TCP, UDP, FTP etc. Even further, Fujita et al. suggests synchronization between the master and slave terminals as Fujita et al. discloses an assumption is made that the master terminal transmits a transmission speed (frame rate) to the slave terminal(s) (see column 7, lines 39-48). Therefore, the Office maintains its rejection based upon Fujita et al.

## References Cited

- 9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:
  - a. Ishikawa (U.S. Patent 6,377,255 B1)
    - Ishikawa discloses a graphic data generating method and apparatus which implements VRML content using a server/client scheme.

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Antonio Caschera whose telephone number is (571) 272-7781.

Art Unit: 2628

The examiner can normally be reached Monday-Thursday and alternate Fridays between 7:00 AM and 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung, can be reached at (571) 272-7794.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

571-273-8300 (Central Fax)

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (571) 272-2600.

aac

AL PATENT EXAMINER

KEE M. TUNG/ SUPERVISORY PATENT EXAMINER